Preparing for Performance-Based Funding 2.0

Critical Questions in Designing Formulas
Experiments in Funding Models

Although a growing number of states are looking to tie state higher education funding to performance indicators, each funding formula varies in ways both big and small. In this regard, states are truly living up to their potential as laboratories for determining what approaches are most effective. The jury is still out on many of the design elements, given that most efforts are relatively new, so this briefing is meant to serve as something of a field guide to the various approaches to performance-based funding as they stand at this moment, with the acknowledgement that this is a rapidly evolving landscape. This briefing is framed around the inherent trade-offs at play among a variety of key formula design considerations and shows how early adopters have attempted to balance what are often competing demands.
A variety of forces are converging to fuel a resurgence of performance-based funding in states across the country. Given the attention from both the state and federal governments, as well as concern from the public at large and the philanthropic sector, this trend may outlast previous attempts to institute performance-based funding.

Current approaches to performance-based funding have drawn upon lessons learned from the flaws of earlier models, and there seems to be a consensus on a handful of funding features. Current models tend to place a meaningful percentage of core funding dollars at risk.

There remain, however, many areas where funding models vary considerably. This variation exists primarily around precisely how states measure performance and how incentives are structured to promote change while minimizing disruption.

When designing appropriate measures, states must consider how to account for diverse missions; whether or not to weight certain student populations or programs; if they should reward progress as well as completions; and whether or not it is feasible to track career outcomes.

When putting change levers in place, states must strike a balance between consequences and stability by deciding how much funding will be at risk; how to help mitigate transition risks; the best way to incent continuous improvement; and whether or not individuals as well as institutions will be held accountable for success.
ROAD MAP

Preparing for Performance-Based Funding 2.0
Performance-Based Funding 2.0: Why It Might Work This Time

Balancing Competing Demands: Challenging Questions in Designing Performance-Based Funding Models

Right Roles for Systems and University Leadership
Performance-Based Funding 2.0

Why It Might Work This Time
Many state legislatures are scrapping traditional funding schemes based solely on headcount in favor of a variety of models based on completion or other student success metrics.

The piloting of these different types of public higher education funding formulas is proceeding at an accelerating pace and is steadily spreading across the nation. Before 2010, there were only four pioneers—Pennsylvania, Indiana, Tennessee, and Ohio.

Since 2010, 29 states have approved or are currently planning success-based funding models and most other states are keeping a close eye on whether these new funding models achieve the desired results.

Performance-Based Funding Spreading Across Nation (Again)*

* As of July 2014.
Given previous attempts to implement performance-based funding (PBF) schemes, there is some skepticism about the staying power of more recent efforts. PBF efforts of the 1990s lasted anywhere from one to four years.

What happened in South Carolina is indicative of the challenges faced by states during the PBF 1.0 era. South Carolina had a difficult time reaching consensus on what KPIs to measure and erred on the side of over-inclusiveness. The result was an unwieldy 37 indicators, which made it very difficult to signal priorities to individual institutions.

Another difficulty in South Carolina was that the absolute amount of state allocation was a moving target. For instance, from 1998 to 1999, the share of state allocation dropped from a very high and visible amount, 38%, down to just 3% after an unexpected state budget shortfall. This made it very difficult for institutions in South Carolina to plan or anticipate the costs and benefits of meeting the new standards.

Despite the skepticism about PBF 2.0, there are several forces at work that may mean it will endure far longer than its earlier incarnations.

### Spotty Implementation in the Last Decades

Duration of Selected State PBF 1.0 Initiatives (Years)

<table>
<thead>
<tr>
<th>State</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>2</td>
</tr>
<tr>
<td>GA</td>
<td>2</td>
</tr>
<tr>
<td>KY</td>
<td>4</td>
</tr>
<tr>
<td>MN</td>
<td>4</td>
</tr>
<tr>
<td>SC</td>
<td>3</td>
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<tr>
<td>NJ</td>
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<tr>
<td>OK</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>1</td>
</tr>
<tr>
<td>TX</td>
<td>4</td>
</tr>
<tr>
<td>WA</td>
<td>2</td>
</tr>
</tbody>
</table>

**South Carolina’s “Moving Target” PBF, 1996–1999**

- Lack of consensus over success KPIs = 37 indicators
- Share of state allocation dropped from 38% to 3% in one year after budget shortfall
In addition to changes at the state level, the Obama administration has made several proposals that would tie federal financial aid to performance outcomes. In August 2013, President Obama made headlines with his proposal “A Better Bargain for the Middle Class.” This was a new proposal for a formula which would factor in access, affordability, and success outcomes, tying institutions’ achievements on those three dimensions to the size of Pell grants and to the loan rates for students.

Later that year, the U.S. Department of Education’s National Center for Education Statistics invited public comments about data, metrics, and methods of weighting and scoring for a Postsecondary Institution Ratings System (PIRS). The stated goal of PIRS is to provide a framework to advance accountability for institutions of higher education while also enhancing consumer access to useful information. The DOE intends to have PIRS in place prior to the 2015–2016 school year, and the administration has signaled the intention to push for a financial aid formula that considers these ratings when the Higher Education Act is re-authorized.

The administration further emphasized the push for performance funding by including a proposal for incentive grants in the president’s 2015 budget. The president’s proposed $4 billion in grants for states that institute performance-based funding would still need congressional authorization, but the administration has clearly signaled its desire to push for new funding formulas at both the state and federal levels.

The President’s Proposal: “A Better Bargain for the Middle Class”
August 22, 2013

President’s 2015 Budget Proposal Includes Incentive Grants for States to Adopt PBF
March 4, 2014

Department of Education Solicits Public Comments for the Postsecondary Institution Ratings System (PIRS)
December 17, 2013

Proposed Introduction of the PIRS Rating System
Prior to 2015-2016 School Year

Proposed Plan Would Create Competition for Access to Financial Aid
Big Philanthropy’s Reach

Another factor that may contribute to the staying power of PBF 2.0 is big philanthropy’s reach, which is much more of a fact of life in the 2010s than in the 1990s. There are now very large, activist foundations that have the dollars and the clout to nationalize student success efforts. Principal among them is Complete College America (CCA).

Established in 2009, CCA is notable for the extremely focused agenda it has in higher education. There are three tenets that guide the organization’s activities: a focus on completion-based performance funding, an emphasis on remedial education, and the creation of an infrastructure for cross-state benchmarking.

CCA has already had a significant impact in the area of performance-based funding. Thirty-three states and the District of Columbia have become CCA alliance partners, and 20 of those 33 are now actively pursuing performance-based funding.

CCA’s initial funding from the Gates and Lumina foundations in 2009 totaled nearly $11 million, which is a fair amount of money to be directly dispersing. But CCA also exercises significant influence in steering the roughly $300 million in other funds from foundations like Gates, Lumina, Ford, and Carnegie. This concerted focus on student success initiatives provides a much greater impetus for performance-based funding than in the past.

Funds and Clout to Nationalize Student Success Efforts

A Focused Agenda

Complete College America Established 2009 with Three Tenets:

- Completion-based performance funding
- Remedial education
- Cross-state benchmarking

Playing a Long Game

CCA Alliance Partners: 33
Pursuing PBF: 20

CCA Early Budget: $10.9M

Foundations Influenced: ≈$300M

- Gates
- Lumina
- Ford
- Carnegie
- Kellogg
- USA Funds
Another Means of Defunding Public Education?

Another reason why performance-based funding might persist this time around is that it may be a politically expedient means of defunding public education.

In the wake of the Great Recession, total appropriations for higher education dropped dramatically in most states. While there is some reason to hope that appropriations might rebound, the reality is that state budgets will remain under considerable pressure from other state priorities like health care and K–12 spending.

The fear is that state funding may not recover, even as the economy rebounds, and PBF could be viewed by legislators as a more politically palatable way to defund higher education that would insulate lawmakers from the political fallout that would otherwise accompany deep cuts to cherished institutions.

“Some individual institutions see more funds under competitive PBF formulas, but in aggregate most schools will be losers and there may be less overall to go around. I wonder if a motive of performance funding is to continue the trend of defunding public higher education while avoiding the publicity fallout.”

Senior Administrator, Public Research Master’s Institution
The final factor that may contribute to the continued focus on student success and completion is market forces.

One example of this comes from Macalester College, where President Dr. Brian Rosenberg had been seeing troubling enrollment trends as a larger number of traditional students were choosing not to attend Macalester in favor of lower cost public options. Macalester decided to justify the price by touting what students get for their money. Dr. Rosenberg even recorded a YouTube video telling students and families that while they might pay larger out-of-pocket totals in tuition, room, and dining, what they get is much more valuable over a lifetime.

More and more private institutions are going to be competing against publics by showing their superior statistics with respect to three dimensions of student success: completion, either through graduation at all or in four years; the inventory or opportunity for internships or study abroad; and the percentage of students going on to pursue advanced degrees.

As students and families begin to consider these as important school choice criteria there will be increased pressure on publics to try to match these numbers.

### Privates Using Stellar Graduation Rates as a Marketing Tool

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**Macalester College Justifying the Price**

<table>
<thead>
<tr>
<th>What You Pay</th>
<th>What You Get</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ $43,472 tuition</td>
<td>• 84% of students graduate in 4 years</td>
</tr>
<tr>
<td>+ $5,214 room</td>
<td>• 2 of 3 students complete an internship</td>
</tr>
<tr>
<td>+ $4,512 dining</td>
<td>• 60% of graduates pursue advanced degrees</td>
</tr>
<tr>
<td>+ $221 fees</td>
<td></td>
</tr>
<tr>
<td><strong>$54,419 total</strong></td>
<td></td>
</tr>
</tbody>
</table>

"You have the opportunity to make this choice only once. As much as we think about price, we think at least as much about the value—the chances that you will graduate on time and the skills and values with which you’ll leave the college."

*Dr. Brian Rosenberg*  
*President, Macalester College*  
*Recruiting Video on YouTube*  

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Balancing Competing Demands

Challenging Questions in Designing Performance-Based Funding Models
The search for an ideal formula is a fool’s errand because there is no single correct formula. Performance-based funding formulas should reflect the values that the state is trying to foster, which ultimately comes down to how a state chooses to balance a number of competing demands.

There are eight fundamental questions that need to be answered to design a fair and effective PBF funding model.

Four of the questions have to do with identifying the right measures. The complicating factor is selecting metrics that allow comparisons between institutions with vastly different missions and vastly different student populations.

There are also questions about the most effective change levers. Here the balance is between setting incentives that are visible and big enough to motivate institutional change while not putting institutions that might already be in precarious financial situations at greater risk.

Challenging Questions...

How Can We Design a Fair and Effective PBF Model?

Right Measures
Balancing Comparability and Mission Diversity

1. How do we account for diverse missions?
2. What student populations and programs should we overweight?
3. Reward intermediate achievement or just completions?
4. Is it financially feasible to track career outcomes?

Right Change Levers
Balancing “Consequential” Incentives and Stability

5. How much funding should be at risk?
6. How do we help low performers manage transition risks?
7. What’s the best “continuous improvement” incentive?
8. Should individual administrators be accountable for success indicators?
While there is still plenty of variation and experimentation taking place, there seem to be a handful of PBF features where states are reaching consensus. In most cases these features are meant to correct for design flaws of PBF 1.0.

First, PBF funding 2.0 is switching away from bonuses. Previously, dollars that institutions received were in addition to base enrollment allocations, PBF dollars are now going into (or coming out of) core funds.

The second difference this time around is that there are more significant stakes, with states putting anywhere from 8% to 100% of their allocation in play, versus the 1% to 2% generally at play in PBF 1.0.

The third area of consensus is a move away from rates, where completions were measured as percentages of cohorts, toward counts. New measures care less about the percentage of the cohort than they do about aggregate completion, regardless of the student start date.

### Consensus Around Handful of PBF Formula Features

<table>
<thead>
<tr>
<th>Performance Funding 1.0</th>
<th>Performance Funding 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bonuses</strong></td>
<td><strong>Core Funds</strong></td>
</tr>
<tr>
<td>In addition to enrollment-based allocation</td>
<td>Success KPIs embedded in core funding formula</td>
</tr>
<tr>
<td><strong>Trivial Funds at Stake</strong></td>
<td><strong>Meaningful Dollars at Stake</strong></td>
</tr>
<tr>
<td>Success metrics affect only 1%–2% of total funding, changing year by year</td>
<td>Success metrics apply to 8%–100% of allocation</td>
</tr>
<tr>
<td><strong>Rates</strong></td>
<td><strong>Counts</strong></td>
</tr>
<tr>
<td>Completions measured as percentages of cohorts</td>
<td>Aggregate completion, regardless of student start date</td>
</tr>
</tbody>
</table>
How Do We Account for Diverse Missions?

The first area where states’ approaches vary is in accounting for diverse missions. States have taken different approaches along a continuum between standardized and customized indicators.

While the precise placement along this spectrum is somewhat subjective, states are approaching this particular question differently. Some states, such as Tennessee, have adopted standard criteria but assigned institution-specific weights. Missouri allows schools to pick from a fixed menu of success metrics. Pennsylvania blends standard and self-defined indicators.

### A Variety of Approaches to Accommodate Diverse Missions

<table>
<thead>
<tr>
<th>Standardized Indicators</th>
<th>Customized Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM, WA</td>
<td></td>
</tr>
<tr>
<td>MI</td>
<td></td>
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<tr>
<td>TN</td>
<td></td>
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<tr>
<td>MO</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>AR</td>
</tr>
</tbody>
</table>

**Tennessee**
- Standard Indicators, Institution-Specific Weights
  - Every institution assessed on same 10 indicators
  - Indicators weighted differently for research vs. access missions

**Missouri**
- Choice within a “Success” Menu
  - Schools pick one of a set of KPI options for four success indicators
  - Define a fifth institution-specific metric

**Pennsylvania**
- Blended Standard and Self-Defined Indicators
  - All schools measured on five standard indicators
  - Schools define five additional metrics that reflect their mission
One of the flaws in the previous generation of success formulas was that everyone could customize their definitions of success, limiting comparability or accountability. Missouri and Tennessee are representative of where most systems appear to be heading. What their approaches have in common is that they are trying to set consistent criteria but are allowing institutions to reflect their individuality by calibrating the emphasis.

Missouri’s program allows institutions to choose five different metrics from among four distinct categories, including an optional “fill in the blank metric,” representing the institution’s specific goals.

In Tennessee, every four-year institution is measured according to the same ten success indicators, but what differs is that the research flagship is judged differently from the less-selective, access-focused master’s institution, by assigning different relative weights to the same success indicators.

### MO and TN Formulas Encourage “Self-Calibration” of Success Indicators

<table>
<thead>
<tr>
<th>Missouri’s Success “Menu”</th>
<th>Tennessee’s Weighted Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Success</strong></td>
<td><strong>Success Indicator</strong></td>
</tr>
<tr>
<td>- Freshman to Sophomore Retention</td>
<td>Students @ 24hr</td>
</tr>
<tr>
<td>- Credit Progression</td>
<td>Students @ 48hr</td>
</tr>
<tr>
<td>- Total Degrees Awarded</td>
<td>Students @ 72hr</td>
</tr>
<tr>
<td>- 6-Year Retention</td>
<td>Bachelor’s and Associate’s</td>
</tr>
<tr>
<td>- Assessment Results</td>
<td>Master’s and Specialist</td>
</tr>
<tr>
<td>- Licensure Pass Rates</td>
<td><strong>Doctoral and Law</strong></td>
</tr>
<tr>
<td><strong>Degree Attainment</strong></td>
<td><strong>Research and Service</strong></td>
</tr>
<tr>
<td>- Share of Spending on Mission</td>
<td>Transfers</td>
</tr>
<tr>
<td>- Revenue Growth per Mission</td>
<td>Degrees per 100 FTE</td>
</tr>
<tr>
<td>- SCH per $100,000 of Funding</td>
<td><strong>6-Year Graduation</strong></td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td></td>
</tr>
<tr>
<td>- Reflecting Institutional Goals</td>
<td></td>
</tr>
</tbody>
</table>
What Students and Programs to Overweight?

Almost all of the formulas include some sort of differential weighting for priority programs or students. In most cases, weighting favors low-income completers to reward and recognize the extra amount of student support services needed to serve an underprivileged or underprepared student body. It is less common for states to reward high-priority degree attainment.

Funding multipliers for low-income completions take a variety of forms in terms of the thresholds to qualify and the funding implications.

North Dakota is somewhat unusual for the amount, priority, and visibility by which they are rewarding high-priority degree attainment. Under their system, high-priority programs like business, engineering, or health sciences are rewarded up to a factor of three times core programs. This is a reflection of both the priority of the skills for the state as well as the comparative cost, in some cases, of labs and practicums.
Another consideration is whether to reward intermediate achievement for progress to graduation or only degree attainment. Most states are clustering in the middle, where they are blending rewards for credit completion as well as graduation, reflecting the growing body of scholarly research showing the step-function increase in likelihood to persist and complete if students are able to reach milestones of 24, 48, and 72 hours of credit. Tennessee’s Complete College Tennessee Act is representative of this blended approach, with slightly different milestones for two- and four-year institutions.

While this approach is consistent with research that shows students achieving these milestones are far more likely to complete, the concern is that it dilutes the focus on completions. At this point, the plans are too new to demonstrate conclusively which argument is correct.

### Most States Taking a Blended Approach

<table>
<thead>
<tr>
<th>Credit Completion</th>
<th>Degree Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>OH</td>
</tr>
<tr>
<td>TN, GA, MO, IN, IL</td>
<td>PA</td>
</tr>
<tr>
<td>MI</td>
<td></td>
</tr>
</tbody>
</table>

#### Intermediate Milestones in Complete College Tennessee Act

- **Four-Year Institutions**
  - 24 hours
  - 48 hours
  - 72 hours
  - Transfers with 12 hours+

- **Two-Year Institutions**
  - 12 hours
  - 24 hours
  - 36 hours
  - Transfers with 12 hours+
  - Remedial and developmental success

#### Pros
- Research shows students achieving progress milestones far more likely to complete
- Focuses institution on degree mapping

#### Concerns
- Dilutes laser-like focus on completions
- Reintroduces enrollment incentive unless SCH/student measured
Is It Feasible to Track Career Outcomes?

Even though it is hard enough to base a funding formula on a comparatively simple, controllable, and trackable metric such as graduations, there are some state system architects and some individual educators speculating about whether it would be feasible and desirable for higher education to track career outcomes.

Many states are doing sporadic surveys to find out whether their graduates are going on to various careers, but otherwise most states are doing very little. The vast majority of states said they are not investing because of concerns about FERPA. The provisions of that law are unclear and states do not want to invite any compliance risk.

State systems that draw a lot of students across borders say that interstate data requires authorization from so many state agencies that it is not really worth the effort. There are also concerns that the surveys of self-reported data, with a low response rate, may not be worth the significant expense.

Few States Tracking Career Outcomes

Student Surveys

Most States

AR, CO, TN, TX, VA

FL

Student Unit Record Matching

Unclear FERPA Rules

Compliance Risk

50% of states cite FERPA as reason for not reporting career outcomes

Crossing Borders

Interstate data exchange requires authorization from multiple state agencies

Surveys Not Worth the Expense?

Shaky Data

Very low response rates, self-reported data

Non-trivial Recurring Costs

$100,000+ to conduct survey
Florida has had some success in tracking career outcomes and earnings by pulling together data from various sources across the state. The Florida Education and Training Placement Information Program (FETPIP) resulted from a 1995 law that mandated the creation of a workforce training outcome tracking system. Architects of the system found state and federal data repositories and then created interfaces to automatically update the data without relying on ad hoc updates.

The system pulls data from various state agencies, most importantly the unemployment system database, which gives salary and wage information for all of the students who remain residents of and are filing W-2s in the state of Florida.

They also get information from the federal government, finding out how many graduates are federally employed by drawing from Department of Defense and Office of Personnel Management data.

This data is matched up with internal records from the state’s own Department of Education system including student records from universities, community colleges, vocational tech schools, and K–12 school districts.

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**Florida Expands Workforce Training Database to Higher Ed**

<table>
<thead>
<tr>
<th>State Agencies</th>
<th>Student Records</th>
<th>Federal Government</th>
<th>Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unemployment insurance</td>
<td>• Universities</td>
<td>• Department of Defense</td>
<td>• Welfare services</td>
</tr>
<tr>
<td>• Education</td>
<td>• Community colleges</td>
<td>• Office of Personnel Management</td>
<td>• Workforce training</td>
</tr>
<tr>
<td>• Economic opportunity</td>
<td>• Vocational schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Children and families</td>
<td>• School districts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Florida’s FETPIP Program**

- Extension of 1995 workforce training outcomes tracking
- Standard definitions, full participation from publics
- State/federal agencies furnish data quarterly
- Dept. of Education aggregates records—no FERPA problems
FETPIP sends out a standard data set every year that serves as the official, first-level state average summary that all of the bureaucrats, educators, and trustees care about. These are all statewide average employment rates for each degree area from associate’s to PhDs.

There is also a database for institutional drill-downs allowing educators at the individual institutions to mine the data to find out what institutions and programs have the highest earnings.

**Multiple Uses of FETPIP Information**

- **Statewide Averages Summary Report**
- **Database for Institutional Drill-Downs**

**Annual Outcomes Report**

- **Success Outcomes**
  - Associate’s
  - Bachelor’s
  - Master’s
  - PhDs

- **Job Outcomes**
  - Employment rate
  - Average wage
  - Continuing education
  - Public assistance

- **Questions**
  - What is the delta in wages for different degree levels?
  - What institutions and programs have the highest earnings?
  - Where do students who start in community colleges wind up?
PBF 3.0: From Completions to Earnings?

If PBF 2.0 was a shift from access to completions, perhaps PBF 3.0 will be a shift from completions to earnings. In 2013, the Texas State Technical College System—the 12 two-year schools—adopted an explicit career outcomes formula.

Under the system, funding will be based entirely on student earnings after they leave the technical college system. The allocation is based on a formula that takes a five-year, rolling average of students completing 9+ credit hours and awards $0.26 for every dollar they earn above the state minimum wage.

There are some obvious questions associated with this funding formula, but it is still in its early stages. Four-year institutions across Texas and state legislatures across the country are monitoring this system, since other states might opt to make earnings a dimension in their funding formulas.

Texas Adopts First-of-a-Kind Career Outcomes Formula

- New formula for technical college system's 12 schools effective 2015
- Funding based entirely on student earnings after they leave system

Five-Year Average

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Student Earnings</th>
<th>Total Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>completing 9+ SCHs</td>
<td>$0.26 for every $1 above minimum wage</td>
<td>$</td>
</tr>
</tbody>
</table>

? How will we track out-of-state students?

? Will programs for needed, but low-paying health care jobs contract?

? Will the formula undermine "counter-cyclicalty"?
Given the difficulty of tracking career outcomes, institutions and state systems might be better served tracking transfers. Increasingly, students are taking a mix-and-match path to a degree. Rather than the traditional path, so-called swirling students are unbundling their degrees by getting credits from a variety of sources.

They might spend two years at a public and transfer to a private, or complete two years at a community college and finish at a four-year school.

Given that it has been so difficult for institutions of higher education to reduce their tuition, it might be perfectly rational for students and their families to reduce their out-of-pocket costs by mixing credit sources.

**Students Driving “Mix and Match” Program to Degree**

<table>
<thead>
<tr>
<th>Option</th>
<th>Degree Configuration</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Six Years at Public University</strong></td>
<td>Three Years in BA Program Two Years in Master’s</td>
<td>$103K</td>
</tr>
<tr>
<td><strong>3 + 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private</strong></td>
<td>Two Years at CC</td>
<td>$83K</td>
</tr>
<tr>
<td><strong>2 + 2</strong></td>
<td>Two Years at Private</td>
<td></td>
</tr>
<tr>
<td>“On-Time” Graduation</td>
<td>Four Years at Public University</td>
<td>$69K</td>
</tr>
<tr>
<td><strong>2 + 2</strong></td>
<td>Two Years at CC</td>
<td>$40K</td>
</tr>
<tr>
<td><strong>Public</strong></td>
<td>Two Years at Public</td>
<td></td>
</tr>
</tbody>
</table>

Six years of room and board significantly increase total cost.

With this option, degree from private university costs less than six-year degree from public.

By far the cheapest option, in part due to fewer years on campus.
Transfer Friendliness as Success Indicator

If this trend continues, more states might pursue the same approach as Michigan, where transfer friendliness is one of the success indicators they track. To qualify for the full rates under Michigan’s current performance funding system, the schools have to demonstrate four dimensions of transfer friendliness.

Schools must participate in the state’s student transfer network and have reverse transfer agreements with at least three community colleges. In addition, they must accept dual enrollment credits from high school and sign on to the state’s tuition restraint pledge. Schools that adopt these policies are eligible for a funding increase tied to performance, which most recently averaged 3%.

Like most new funding formulas, there are potential flaws and unintended consequences, like one school that reportedly raised tuition to offset an anticipated shortfall in performance funds.

Despite this, the goal of college affordability and progress toward graduation might be better served by putting the scarce tracking resources against measuring transfer friendliness, rather than career or earnings outcomes.

Michigan Considers Articulation with Two-Years for PBF Eligibility

Linking PBF Escalators to Transferability

- Participate in Michigan’s student transfer network
- Reverse transfer agreements with three community colleges
- Accept dual-enrollment credits
- “Tuition restraint”

An Unintended Temptation to Raise Tuition?

Heard on the Street

Another institution told us they realized they weren’t going to meet the PBF eligibility requirements in time. They knew they’d lose the state funding boost no matter what, so they upped tuition 9% to offset the hole in the performance funds.”

Senior Administrator
Regional Public Institution

Schools adopting these policies eligible for 3% increase in PBF
Balancing Competing Demands

The other critical formula design questions revolve around creating the right set of consequences to motivate real changes in behavior and the desired results. This also requires a consideration of how to mitigate potentially unnecessary or undesired instability in university finances or a departure from critical parts of the university culture.

Challenging Questions in Designing Performance Funding Models

How Can We Design a Fair and Effective PBF Model?

**Right Measures**
*Balancing Comparability and Mission Diversity*

1. How do we account for diverse missions?
2. What student populations and programs should we overweight?
3. Reward intermediate achievement, or just completions?
4. Is it financially feasible to track career outcomes?

**Right Change Levers**
*Balancing “Consequential” Incentives and Stability*

5. How much funding should be at risk?
6. How do we help low performers manage transition risks?
7. What’s the best “continuous improvement” incentive?
8. Should individual administrators be accountable for success indicators?
How Much Should Be Put at Risk?

The threshold question is: “How much state funding should be put at risk?” There is no consensus yet on the minimum needed to spur change, and the allocation is often the result of political horse-trading and budget realities rather than behavioral economics or incentive theory.

States where the performance funding is less than 15% of the total base allocation are typically relying on the signal value of measuring student outcomes and the competitive nature of institutions once progress reports begin to circulate.

Some states are rising above what is generally regarded in the private sector as the 15% visibility bar required to get people’s attention. It is important to note that many states are ramping up toward these percentages gradually, and in some cases capital funds might be allocated separately.

No Consensus Yet on Minimum Needed to Spur Change

- **Under 2%**: AZ, IL, MA
- **3% to 7%**: MO, PA, NM, MI, MN, IN
- **15% to 25%**: LA, NV**, AR**
- **All 100%**: TN, OH, MS**

* Does not include states treating performance funds as fixed-dollar pools or bonuses on top of base allocations.
** End-state PBF goals phased in over next years.
The next critical concern is how to manage transition risk. Most states mitigate risk through gradual implementation or by putting a financial safety net in place to soften the blow of any negative consequences.

Washington and Missouri are examples of states that allow a year for institutions to familiarize themselves with the success criteria and the formula. It gives schools a year to demonstrate how they would perform if they changed nothing.

Stop-loss provisions are where the state sets a floor, or in some cases a ceiling, on how much an institution can lose or gain, in the first year of performance funding. Usually it’s about 1% or 2%. New Mexico and Ohio are two states that have done this in the past, but it appears to be an approach that is falling out of favor.

Some states, such as Arkansas and Indiana, are implementing escalating risk pools. This is where the amount of base funding subjected to PBF increases in predetermined increments. For example, from 5% to 10% from year 1 to year 2, 10% to 15% from year 2 to year 3, and so on until the formula’s cap is achieved.

And finally, Ohio and Tennessee have relied on three- to five-year rolling averages. A lot of people have given credence to this because of the pioneering efforts of these states. The rolling averages insulate the institutions from externalities that might unfairly and unexpectedly affect institutional performance in a given year.

Protecting Institutions from Financial Disruption

Gradual Implementation

- Washington (WA)
- Arkansas (AR)
- Indiana (IN)
- Tennessee (TN)
- Ohio (OH)
- New Mexico (NM)

Financial Protections

- Learning Years
  - One-year period of establishing data baseline to get buy-in for success KPIs and familiarize institutions with formula
  - (WA, MO)

- Stop-Loss Provisions
  - State sets floor of how much individual institutions can lose (usually 1%-2% of previous year’s allocation) in first year of PBF
  - (NM, OH)

- Escalating Risk Pools
  - Increase amount of funds subject to PBF in predetermined increments (e.g., 5% to 10% to 15%) until formula’s steady-state cap achieved
  - (AR, IN)

- Rolling Averages
  - Formula uses 3- to 5-year average of success indicators to insulate institutions from economic cycles
  - (OH, TN)
PBF Impact Modeling

Experts agree that one of the most powerful things systems can do to help institutions anticipate and manage transition risk is to make it easy to model the impact of the state formula. The Tennessee Higher Education Commission has devised a user-friendly tool that helps all budget planners and academic planners anticipate the financial impact of Tennessee’s unique funding model.

Tennessee’s formula is competitive; the state sets a fixed amount of budget dollars at risk, but the amount any institution receives is determined by institutional performance.

The tool allows institutions to plug in assumptions about not only their performance, but also for competitor institutions. It also allows users to make assumptions about whether the overall state funding is likely to go up or down. A final feature is that it allows dynamic scenario modeling, so that the budget planners can talk to academics to find out what the likely best-case and worst-case scenarios are to take the guesswork out of yearly planning.

Tennessee Tool Helps Anticipate Financial Impact of Competitive Funding

<table>
<thead>
<tr>
<th>Annual Outcome Change</th>
<th>Institution A</th>
<th>Institution B</th>
<th>Institution C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Accumulating 24 Hours</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Bachelor’s and Associate’s</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Six-Year Graduation Rate</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Percent Change in Estimated Funding</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Change in Estimated Funding ($1K)</td>
<td>$110.3</td>
<td>$54.0</td>
<td>$108.2</td>
</tr>
</tbody>
</table>

Models gains and losses in Tennessee’s competitive funding system.
The next question is how to motivate continuous improvement. Under previous outcomes-based formulas, improvements would often stagnate after a year. This may result from problems with peer benchmarks.

The first potential problem arises when institutions themselves define peer sets. The problem here is sandbagging. Systems point out that institutions did what anyone would do by choosing mediocre benchmarks that they could easily best.

An equal and opposite problem occurs when systems define the peer sets. This tends to generate a predictable amount of institutional pushback, with institutions rejecting the comparators as being “not enough like me.”

Finally, the third concern is that any peer set runs the risk of underperformance. No matter who selects the peer set, those institutions may not be as motivated or as high-performing as expected.

Neither Systems Nor Institutions Happy Tying Targets to Peer Sets

1. Institutions Define Peer Sets
   - Sandbagging
   - Schools choose mediocre comparators

2. System Defines Peer Sets
   - Pushback
   - Institutions reject comparators: “Not like me...”

3. Underperforming Peer Sets
   - Plateauing
   - Doesn’t guarantee continuous momentum for improvement
Competitive Funding

States are employing two approaches to avoid these structural differences. One of them is Tennessee’s competitive funding model.

Winners under this model capture an increasing share of Tennessee’s higher education resources at the expense of the laggards. Three of the top performing schools saw increases in their share of state allocations. In particular, University I in the graph below, Austin Peay State University, did much better under this model as a result of increased student support efforts, earning them additional dollars to reinvest. Together, the six lower performing schools together received less than 1% of the recent $14 million increase in state funding.

The Tennessee Higher Education Commission is not running away from how meaningful a philosophical shift this is. This is not in the traditional spirit of higher education shared success and shared suffering. This is a very deliberate decision to push money to where it was earned rather than distribute it evenly to everyone.

‘Winners’ Capturing an Increasing Share of Tennessee Resources

Percentage Change in Share of State Allocations
Since Onset of Tennessee’s Outcomes Funding Model

Laggards Lose Share of Allocation
Six schools together received less than 1% of the recent $14.6M increase in overall Tennessee state funding

This is a definitely a philosophical shift. We decided to push money to where it was earned rather than distribute it evenly to all. Our model is rewarding those who outperform the rest.”

Tennessee Higher Education Commission Representative
What’s the Best “Continuous Improvement” Incentive?

Washington State took a different approach. Their formula is designed to promote year-over-year improvement rather than competition among peer groups or within the state. Funding for schools in the technical college system is tied to momentum points. Momentum points are accumulated by how well students do on standardized exam scores, pre-college writing or math course completion, credit accumulation, and degree or certificate completion.

Schools are then rewarded for the incremental improvement, with each additional point tied to a dollar amount determined by that year’s state budget. One appealing feature is that the schools can bank the points. If the state does not budget the full amount and every institution outperforms across the system, accumulating more points than the state has accounted for, the institutions can roll those points over to the next year. The state is then contractually obligated to make good on that improvement in the next budget cycle.

While there is much to like about this approach, critics have complained that high performers are being penalized because there is not enough room for improvement. And while the intent is to promote collaboration, many schools still view the model as a zero-sum game. In addition, smaller schools worry that they may not have the analytic resources to identify areas for continuous improvement.

Formula Designed for Fairness Sees Competition Resurface

Washington Tech College Funding Tied to Improvement in “Momentum Points”

- Standardized exam scores
- Pre-college writing or math
- 15 SCHs
- 30 SCHs
- 45 SCHs
- College-level math course
- Degree or certificate completion

<table>
<thead>
<tr>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Points</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 Points</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>

$84 per point

- Points value = last year’s point accumulation/next year’s likely budget
- Schools can “bank” points

Perceptions of Unfairness Persist

Recognize Schools Serving Less-Prepared Students
Top performers feel penalized, little room to improve

Non-competitive = Collaborative
“Any dollar spent on one school isn’t spent on another”

Data-Driven Continuous Improvement
Small schools lack IR resources, can’t tell where they’re off-path
Should Individual Administrators Be Accountable for Success Indicators?

The last question, which may be a futuristic, PBF 3.0 analog to include career outcomes in funding formulas, addresses how to embed incentives in the performance evaluations of individual senior leaders or senior administrators. The logic here is that institutions change people to a certain extent, but that people absolutely change institutions. If you really want to get something done, particularly to get as much impact as possible out of the comparatively small amount of budget dollars at stake, it might make more sense to direct these incentives at the level of a university president or dean. A $100,000 incentive might mean a lot more to an individual than it would to an institution.

The closest example of this can be found in Tennessee, where the state created a point-and-click dashboard that Tennessee trustees use as a performance indicator to find out how individual schools are doing. At a trustees meeting, the president might have to open the dashboard, so they can look to see whether the school is improving against itself as well as against the other measures. This creates organizational momentum and incentives for putting people in charge of what had previously been vaguely assigned aspirations. The truism is that student success has been everybody’s goal but nobody’s job, so dashboards cascading down to the president help address this ownership.

One could even extrapolate that down to the dean’s level. This model is primarily found in private universities, but a handful of institutions are starting to include student success as criteria in academic program review alongside the more traditional scholarly and financial metrics.

### Reputational and Financial Levers Get Leaders’ Attention

**President’s Success Dashboards**
Tennessee trustees use system-maintained dashboard of performance metrics as basis for chancellor evaluations

- Students accumulating 24 hours
- Students accumulating 48 hours
- Students accumulating 72 hours
- Undergraduates transferring out with 12 hours
- Six-year graduation rate
- Bachelor’s degrees awarded
- Master’s/Ed. Spec. degrees awarded
- PhD/Law degrees awarded
- Degrees per 100 student FTEs
- Research expenditures

**Dean’s 360-Degree Program Review**
Handful of institutions are including student success as criterion in academic program review, alongside scholarly and financial metrics

**Program Review KPIs**

<table>
<thead>
<tr>
<th>Academic Quality</th>
<th>Capacity Utilization</th>
<th>Student Success</th>
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<tbody>
<tr>
<td>Research expenditures</td>
<td>Articles and citations</td>
<td>Enrollment growth</td>
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<td>Space utilization</td>
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Right Roles for Systems and University Leadership
Almost everybody agrees that there would be a great benefit around improving higher education’s predictive capabilities. Across early warning systems, admissions, financial aid, advising, academic programs, and support services, there are predictive analytics that are coming to bear—but there are still questions. Should data be centralized? Should information systems be centralized? Should standards be promulgated throughout the system?

State systems across the country are taking different approaches to these questions, and there will be much to learn from early adopters and trend setters in these areas.

What Would a ‘Predictive’ Campus Look Like?

Which Activities Should Be Facilitated by Systems?

**Early Warning**

Systems would automatically sense at-risk students and notify intervention teams, without relying on faculty alerts

**Advising**

Advisors would guide students based on proven patterns of success, customized to their individual needs and goals

**Admissions**

Admissions would identify which applicants have the best chance of graduating—and which need help right from the start

**Academic Programs**

Students would pick majors based not just on interest, but also on likelihood of graduation and career success

**Financial Aid**

Financial Aid would anticipate warning signs of financial distress and deploy targeted assistance at key moments

**Support Services**

Staff would precisely target customized services to students—before they even know that they need help
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Student Success Collaborative

Growing from a few early partners to over 100 members over the course of 2014, the Student Success Collaborative leverages the power of predictive analytics and a member-driven approach to product innovation to triage advising needs, assess student progress, and guide intervention.

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